

***Examiner's Amendment to the Specification***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with King L. Wong on 10/13/11.

Please amend column 11, lines 16-27, as follows:

These primer DNA's were subjected to phosphorylation treatment at 37° C. for 30 minutes in the reaction medium shown below followed by denaturation at 70° C. for 10 minutes:

10 pmol/μl primer DNA 2 μl

10xkination buffer 1 μl

10 mM ATP 1 μl

[H<sub>2</sub>O] H<sub>2</sub>O 5 μl

T4 polynucleotide kinase 1 μl

wherein the 10xkination buffer is 1000 mM Tris-Cl (pH 8.0), 100 mM MgCl<sub>2</sub>, at 70 mM DTT.

***Examiner's Statement of Reasons for Allowance***

The following is an examiner's statement of reasons for allowance: At the time of the invention, geranylgeranyl diphosphate synthase isolated from *Sulfolobus acidocaldarius* and an encoding polynucleotide were known as shown by Nishino et al. (EP 0674000 A2; cite 5 of the IDS filed on 3/18/05). However, the prior art of record does not disclose a mutant of *Sulfolobus acidocaldarius* geranylgeranyl diphosphate as encompassed by the claims. Therefore, the mutant polypeptide, polynucleotides, host

cells, and processes of claims 1, 3-4, 6-7, 11-16, and 49-54 are allowable over the prior art of record. The reissue declaration filed on 9/6/11 satisfies the requirements of 37 CFR 1.175.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Steadman whose telephone number is 571-272-0942. The examiner can normally be reached on Mon to Fri, 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath N. Rao can be reached on 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David J. Steadman/  
Primary Examiner, Art Unit 1656